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ABSTRACT

This paper brings together four short discussions that focus on how the construction and analysis of digital movies support theory-building, and whether that theory-building is equitable. Researches who have used digital media extensively over the last decade address how participants in studies using digital media become collaborators and co-authors of rich-media texts, and how readers and viewers are also invited to partake in the construction of the story being created. The underlying premise of this panel is that the creation of digital movies is a social experience very much affecting and affected (and sometimes thwarted) by the cultures in which they are created. Topics include: "How Teaching & Learning Change Using Media-Rich Texts: Design Teams Using Ethnographic Methods & Tools" (Ricki Goldman-Segall); "Cultural Readings of Digital Texts: A Media-Based Approach to Foreign Language Teaching & Learning" (Maggie Beers); "New Research Tools/Gender and Society" (Suzanne de Castell and Mary Bryson); and Creating Interactive Representations of Student Multimedia Work: Ethnomultimediography" (Brian Reilly). (MES)

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How the Construction & Analysis of Digital Movies Support Theory-Building

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Introduction

Ricki Goldman-Segall

We are at a time in the development of new tools when we can choose to design digital media authoring and annotation tools to promote the representation of many perspectives and identities. In this panel, researchers who have used digital media extensively over the last decade will address how "participants" in studies using digital media become collaborators and co-authors of rich-media texts. We will address

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how we invite not only the participants, but also readers and viewers to partake in the construction of the story being created. The question we will be tackling in this panel is: Does the construction and analysis of digital movies support theory-building? And is that theory-building equitable? We will explore this issue from various perspectives: tools and techniques; gender and culture; creative arts and media sciences; science and society; language and culture; learning and research methods; epistemology and ethnography; and, digital data and design teams. We will also discuss the theoretical perspectives on methodological issues that deal with how the making of media stories becomes a platform for discussing important issues such as: whose story is being told? whose purpose is being presented? what's the story? which story gets told? why do we tell stories in our knowledge making? and, what tools do we need to create these stories?

The underlying premise of this panel is that the creation of digital movies is a social experience very much affecting and affected (and sometimes thwarted) by the cultures in which they are created. As creators represent themselves and others in their personal digital artifacts, they contribute to the larger cultural context in which their work is situated, thereby changing the nature of the learning environment and the cultures which constitute the community. Electronic media, when used in teaching and learning, thus involves both students and educators in a reflexive ethnographic experience where they can build, deconstruct, and reconstruct their own and each other's cultures. By inviting the "audience" to participate in their interpretation, learners can observe how new views are layered about these media creations, extending the personal cultural story. A platform for multi-loguing is built and new communities of inquiry are formed.

How Teaching & Learning Change Using Media-Rich Texts: Design Teams Using Ethnographic Methods & Tools

Ricki Goldman-Segall

As chair, moderator, and one of the presenters, I will invite the audience to think about the topic: *How Teaching and Learning Change Using Media-Rich Texts: Design Teams Using Ethnographic Methods & Tools.* This topic was my particular focus of a UBC Teaching & Learning Enhancement grant called *Making Movies, Making Theories: Digital Media Tools for Educating Educators to Connect Experiences to Curriculum* written by Goldman-Segall (PI) and Beers (Co-PI), 1998. The study was carried out in a Curriculum Studies Course called *The Digital Media Classroom* taught by Goldman-Segall and in a Modern Language Education course of taught by Beers. In *The Digital Media Classroom*, students created digital movies around the theme, *Forests Past, Present, and Future* and then had the opportunity to analyze their constructions using both Constellations and WebConstellations™, tools I have created to layer viewpoints and build not only the thick description, but also thick interpretations. Students connected their personal experience to the course content and critiqued the concepts they were studying by designing cultural artifacts for the purpose of viewing each other's constructions using networked tools to share, annotate, and analyze their *living narratives* in relation to the subject being studied in the classroom.

One of recent innovations in Web-based media learning environments is that members of emerging online cultures can make meaning of the rich media texts they construct as collaborative design teams. They can share their *points of viewing* and build upon each other's thinking. They can construct knowledge together as a community, creating new interpretations. And, they can exhibit digital media artifacts using a range of media "forms" that call for a new method of *e-value/ation*. Networked digital media tools for collaborative investigation offer learners, educators, and researchers the opportunity to negotiate interpretations leading to more inclusive theories of knowledge. Early tools on the Web promised this more inclusive cross-cultural paradigm concerning the generation of human knowledge. These new tools deliver.

Yet, still we ask ourselves: How does this latest technology change our previously-held notions of teaching and learning, researching and publishing? How do we design learning environments to facilitate innovative platforms for engagement and response within these socially constructed and mediated communities of inquiry? In my presentation, I will describe how learners and educators use tools and techniques for collaborative theory building. These research tools become learning environments—virtual places where theories can be negotiated and shared as users view data from diverse perspectives. They become places where learners and educators work as teams to construct theories as they explore more deeply the real and virtual worlds they inhabit

Yet, these new media cannot be embraced without taking into account the effect they will have on our interpretation and construction of culture. By becoming involved in making their own digital movies, student and faculty creators may better understand the layers of discourse which characterize both their own and others' cultures and can, in the process, participate in an ever evolving cultural discourse, thereby changing the nature of the didactic learning environment typically inhabiting our academic institutions. By becoming active participants in the research process, students, whom I will describe in this panel, were better able to examine diverse points of viewing embodied not only within the various cultures they are members but within themselves as a single individual.

Cultural Readings of Digital Texts: A Media-Based Approach to Foreign Language Teaching & Learning

Maggie Beers

The new British Columbia foreign language curriculum for grades 5-12 highlights the importance of cultural understanding and positive attitudes for students' success in their language learning endeavors as well as in their ability to assume their roles as international citizens. In order to effectively integrate the notion of culture into their curriculum, foreign language teachers are encouraged to look beyond the fields of linguistics and literature to those of anthropology, sociology, psychology and education and to adopt a critical pedagogy of intercultural discourse which speaks to the multiple voices that comprise an individual and her culture (Kramsch, C. and von Hoene, L., 1995).

Despite encouragement to use emerging technologies to create innovative learning environments that enable students to become ethnographers, rather than 'tourists' (Goldman-Segall, 1998, Fischer, 1996), foreign language teachers cite 'textbook notes' and 'authentic texts' as their top resources for teaching culture (Moore, 1996). Yet modern media, with their capabilities to create "media rich texts" complete with sound, images and video, create a new, unexplored predicament for the language teacher and learner in this new role as ethnographer. Whereas the anthropologist traditionally started from a context-and-experience-rich environment and imagined a 'text', the language teacher and learner start with a 'text' and must imagine a context, drawing from previous experience, knowledge, or stereotypes about the foreign culture (Teroaka, 1989).

Based on communicative language teaching and constructionist learning models, I've implemented a media-based approach which encourages pre-service and in-service foreign language teachers to use their personal experiences to create and interpret multi-layered "media rich texts." Participants use a digital movie authoring and design tool, CineKit™, to make representations of themselves in the form of digital movies and then use WebConstellations™ to share, annotate and critique their living works in relation to the subject, *(the integration of language and culture with modern media)*, being studied in the course.

The aim of this research is to develop theories about how culture and representation affect one's reading and interpretation of media texts. An initial pilot study to test this approach was funded by a UBC Teaching & Learning Enhancement grant: *Making Movies, Making Theories: Digital Media Tools for Educating Educators to Connect Experiences to Curriculum*, written by Goldman-Segall (PI) and Beers (Co-PI), 1998, and carried out in July/August of 1998 in a Language Education Course I designed and taught for this study: *Advanced Studies in Language Education: Integrating Language and Culture with Modern Media (MLED 480B)*. The final phase of this research will be completed in the same course in May/June of 1999.

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New Research Tools/Gender and Society

Suzanne de Castell & Mary Bryson

What is critical digital ethnography, and why do we need it? This is a very important question. For as we learn to use the new research tools digital media provide, we might be forgiven for overlooking, in our warranted enthusiasm for the ways of seeing they make possible, some dimensions of the medium which can just as easily prevent us from seeing. In *Fictions of Feminist Ethnography*, Kamala Visweswaren (1994) speaks of the tension between deconstructive practices and realist images: that this is a necessary and productive tension is a claim we will explore by presenting, as examples, the particular uses we have made of digital "texts" within the GenTech research group (see http://www.educ.sfu.ca/gentech/) that we co-direct.

The GenTech project has, for the past six years, focused its research efforts on "girls, tools and schools". We have argued that access to uses of tools is a gendered performance enacted through its representation, and we argue, therefore, that research 'stories' ought conscientiously to interfere with any propensity to represent gender "differences" as natural, fixed or immutable. In this session, we will make use of GenTech's digital movies about gender and tool use to explore a conception of theory as theatre and digital research as "culture-jamming". (1998)

We have all been trained, through our years of text-based education, to read deconstructively, to question and challenge and unpack the literary and figurative and narratological devices whose evolution and sophistication is part of our long and well-developed literate tradition. It is in this way that theory can outstrip practice---even with new tools. We know that we, and perhaps to a lesser extent, our students, are far less well-equipped to deconstruct visual texts, and there is a substantial body of scholarship from within screen theory which testifies to our increased vulnerability to being what we might call "impressionable readers" of filmic and video "texts"(Joyrich, 1995). As one grade 3 student insisted "When we see it on television, we think its true". We want to build on this simple reminder, an important caution ---its not just the grade threes who "think its true". As filmmaker Trinh T Minh-ha has advised

us, we need to be ever-conscious of the way fiction does its best work at the very heart of factual representation.

When we read an account of, for example, gender inequity in a science classroom, we are accustomed to speculating, re-considering, weighing the evidence, imagining counter-instances, presuming there is much more we are NOT being told. But when we view, for instance, an eleven year old girl telling us "Boys and girls have equal access to the school computers, only she herself is "just not interested" in computers, or a high school girl reassuring us that "girls can do anything, I just don't like science", our critical faculties are more inclined to, as Wittegnstein put it, "go on a holiday". The danger for us is that we risk reproducing, albeit with new research tools, the very positivism we imagine ourselves to have left far behind. And clearly, a proliferation of realist accounts alters that not a whit: all that this produces is a pluralistic positivism, but positivism it is all the same.

As is so often the case, we may need to go backwards in order to move ahead, and where we can most usefully go back to, we suggest, is to the medium of theatre, and specifically, to the activist theatre of Bertold Brecht, to resurrect for our use with these new tools, some invaluable, but currently overlooked, old representational practices. In this presentation, we describe and illustrate the "mise-en-scene" of digital practice, in order to construe theory as theatre, and to outline a post-critical performative praxis of digital representation.

Creating Interactive Representations of Student Multimedia Work: Ethnomultimediography

Brian Reilly

Anthropological methods of ethnography, especially those applied to learning contexts (Erickson, 1984; Florio-Ruane, 1989; Flower, 1989; Lave & Wenger, 1991; Wolcott, 1995) as well as more recent theories of activity theory as applied to technology use (Nardi, 1996b) emphasize the importance of understanding context as it relates to learning and technology use. Schools and classrooms are communities where tradition, cultural norms, and social relationships greatly influence what goes on, what gets done, and who does it. In order to understand and represent the particular learning communities I will discuss in my presentation, I chose to create interactive multimedia representations of these communities and contexts in an attempt to more faithfully and fully describe and present what went on in them. I use the term "ethnomultimediography" to capture this approach to research and representation.

This type of qualitative research includes elements of participant observation, oral history, ethnography, and case study, and requires some changes in the research process to incorporate multiple media — print, video, interactive multimedia — in the final representations. Discussions of multimedia ethnography (Goldman-Segall, 1995; Goldman-Segall, 1998) have influenced and informed my research methods as well.

Using video extensively to record classroom observations and interviews changes the relationship between the researcher and the research participants, in this case, teachers and students. In contexts where students themselves are multimedia/video producers, using a video camera can be less of an intrusion than it might be elsewhere, but it is still an intrusion, as student work is not generally documented in this way. One research tradition, that of subject anonymity, presents a challenge when the faces and voices of the participants form much of the content of the multimedia research report, but by making the participants aware of the research goals from the outset and treating their words and work with respect can make the absence of anonymity a strength rather than a limitation.

In my presentation, I will briefly show examples of digital video incorporated into multimedia representations of research on student multimedia work. I will discuss how these representations change

our understanding of the learning communities they are drawn from, and how the process of creating them affects the researcher and the "researched".

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